AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0006] with the following amended paragraph:

[0006] Consider for example the function shown in Figure 1, denoted Lcomp1. This function can be described as follows. We first define a function $f(L_{in})$:

$$f(L_{in}) = L_{max} * (1 - (1 - L_{in}/L_{max})^{\gamma}) \qquad (1)$$

where $\gamma > 1$ is a selectable parameter. Function f(), shown as the partially dashed and partially solid curved line in Figure 1, is the inverse-gamma-inverse (IGI) function, and has been used successfully in previous work for luminance compression. Assuming that the reproducible lightness range of the output device is from L_{black} to L_{max}, a hard-clipping function is then applied:

$$\begin{aligned} \mathrm{Lcomp1}(L_{in}) &= f(L_{in}) && \text{if } f(L_{in}) \geq L_{black} \qquad (2) \\ &= L_{black} && \text{if } f(L_{in}) < L_{black} \end{aligned}$$

Lcomp1 is shown as the dark solid line in Figure 1. For reference, the identity function is shown as a dashed straight line. Note that the overall effect of Lcomp1 is to compress the range [0-L_{max}] to the range [L_{black}-L_{max}]. Also, Lcomp1 will generally preserve or enhance the image contrast. However, all L* variations in the range from 0-L_{black} in the input image will be destroyed, since these are all mapped to the same output, L_{black}. Thus shadow detail is likely to be diminished or destroyed with Lcomp1.

Please replace paragraph [0023] with the following amended paragraph:

[0023] Referring to equation (~~2~~3), note that in shadow regions, L_f is small, α is close to zero, and the soft compression function Lcomp2 predominates. In all other regions (i.e., mid-tones, highlights, and regions of high local contrast), L_f increases as does α (L_f), and the clipping function Lcomp1 begins to predominate. Thus the luminance compression is adapted to suit the local spatial characteristics of the image.

Please replace paragraph [0027] with the following amended paragraph:

[0027] In accordance with another embodiment of the system and method of the invention, C_1 and C_2 are applied to low pass filter module 20 for distinguishing shadow regions in the image and for outputting a filtered chrominance component C_{1f} and C_{2f}. In this case, the blending function $\alpha()$ is a function of chrominance as well as luminance, i.e., $\alpha(L_f, C_{1f}, C_{2f})$. This blending function may be substituted in equation (~~2~~3) for calculating L_{out}.